Abstract of the Disclosure

NONLINEAR ACTIVE CONTROL OF DYNAMICAL SYSTEMS

A control system for reducing cargo pendulation. The control system calculates a correction factor and adds the correction factor for the operator input motions in addition to the motion of the platform in order to provide a reference position of the suspension point of the hoisting cable. The reference position is then provided to a tracking controller so that the crane can be forced to track the needed motions for reducing the cargo pendulation.